

CLAIMS

What is claimed is:

- 1 1. A memory device comprising:
 - 2 a main flash array; and
 - 3 a hidden storage area connected to the main flash array, wherein the
 - 4 hidden storage area can not be accessed without a valid password.
- 1 2. The memory device of claim 1, wherein the hidden storage:
 - 2 area comprises one or more hidden storage memory banks.
- 1 3. The memory device of claim 2, wherein the hidden storage memory banks
2 are divided into one or more user spaces and a password space.
- 1 4. The memory device of claim 3, wherein the valid password allows
2 accesses to only one of the user spaces.
- 1 5. The memory device of claim 2, wherein the hidden storage memory banks
2 include a swap space to copy data between the hidden storage memory
3 banks.
- 1 6. The memory device of claim 2, wherein the hidden storage area further
2 comprises a bank selector to select a hidden storage memory bank.

1 9. The memory device of claim 8, wherein the valid memory
2 address is provided by a host.

1 10. The memory device of claim 7, wherein the hidden storage area further
2 comprises a valid password register to indicate a password has been
3 verified by an internal processor.

1 11. The memory device of claim 10, wherein the hidden storage area further
2 comprises a bad password counter, to count the number of times the
3 internal process is unable to verify the password.

1 12. A method, comprising:
2 storing one or more valid passwords in a hidden storage memory bank;
3 writing a password from a host into the hidden storage memory bank; and
4 verifying the validity of the written password against the valid stored
5 passwords.

1 13. The method of claim 12, further comprising permitting access to read from
2 the hidden storage memory bank if the password is verified.

1 14. The method of claim 13, further comprising permitting access to write to
2 the hidden storage memory bank if the password is verified; and a valid
3 address in the hidden storage memory bank is provided.

1 15. The method of claim 12, further comprising dividing the hidden storage
2 memory block into one or more user spaces, a password space, and a
3 swap space.

1 16. The method of claim 12, further comprising writing a recovery password
2 that allows a bad password counter to be reset.

1 17. The method of claim 12, further comprising writing a system administrator
2 password that allows the hidden storage memory bank, a recovery
3 password, and a bad password counter to be reset.

4 18. A computer readable medium having stored thereon a plurality of
5 instructions, said plurality of instructions when executed by a computer, cause
6 said computer to perform:
7 storing one or more valid passwords in a hidden storage memory bank;
8 writing a password from a host into the hidden storage memory bank; and
9 verifying the validity of the written password against the valid stored
10 passwords.

1 19. The computer-readable medium of claim 18 having stored thereon
2 additional instructions, said additional instructions when executed by a
3 computer, cause said computer to further perform permitting access to
4 read from the hidden storage memory bank if the password is verified.

1 20. The computer-readable medium of claim 19 having stored thereon
2 additional instructions, said additional instructions when executed by a
3 computer, cause said computer to further perform permitting access to

4 write to the hidden storage memory bank if the password is verified; and a
5 valid address in the hidden storage memory bank is provided.

1 21. The computer-readable medium of claim 18 having stored thereon
2 additional instructions, said additional instructions when executed by a
3 computer, cause said computer to further perform dividing the hidden
4 storage memory block into one or more user spaces, a password space,
5 and a swap space.

1 22. The computer-readable medium of claim 18 having stored thereon
2 additional instructions, said additional instructions when executed by a
3 computer, cause said computer to further perform writing a recovery
4 password that allows a bad password counter to be reset.

1 23. The computer-readable medium of claim 18 having stored thereon
2 additional instructions, said additional instructions when executed by a
3 computer, cause said computer to further perform writing a system
4 administrator password that allows the hidden storage memory bank, a
5 recovery password, and a bad password counter to be reset.